

# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO. FILING DATE		FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO
10/698,846	10/30/2003		Laurent Massoulie	MS1-1632US	9313
22971	7590	10/10/2006	EXAMINER		
•		RPORATION	WALSH, JOHN B		
ONE MICR		ROUP DOCKETING WAY	ART UNIT	PAPER NUMBER	
REDMOND	, WA !	98052-6399	2151		
				DATE MAILED: 10/10/2000	5

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application N	Application No.		Applicant(s)				
	Office Action October	10/698,846		MASSOULIE ET AL.					
	Office Action Summary	Examiner		Art Unit					
		John B. Walsh		2151					
Period fo	The MAILING DATE of this communication or Reply	n appears on the co	er sheet with the c	orrespondence ad	idress				
WHIC - Exter after - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR RICHEVER IS LONGER, FROM THE MAILIN nsions of time may be available under the provisions of 37 CF SIX (6) MONTHS from the mailing date of this communication of period for reply is specified above, the maximum statutory per to reply within the set or extended period for reply will, by sereply received by the Office later than three months after the period patent term adjustment. See 37 CFR 1.704(b).	G DATE OF THIS ( FR 1.136(a). In no event, h in. eriod will apply and will exp statute, cause the application	COMMUNICATION bwever, may a reply be time ire SIX (6) MONTHS from in to become ABANDONE	N. nely filed the mailing date of this o D (35 U.S.C. § 133).					
Status :	·								
1) 又	Responsive to communication(s) filed on <i>I</i>	RCE of 8/31/2006.	•						
2a)□	This action is <b>FINAL</b> . 2b)⊠ This action is non-final.								
3)	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is								
, <b>-</b> _	closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.								
Dispositi	on of Claims								
4)⊠	Claim(s) 1-28 is/are pending in the applica	ation.							
	4a) Of the above claim(s) is/are withdrawn from consideration.								
	Claim(s) is/are allowed.								
·	Claim(s) <u>1-28</u> is/are rejected.								
7)	Claim(s) is/are objected to.								
8)□	Claim(s) are subject to restriction and/or election requirement.								
Applicati	on Papers								
9)□	The specification is objected to by the Exa	miner							
·	10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.								
,_	Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).								
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).									
11)	11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.								
Priority ι	under 35 U.S.C. § 119								
12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).									
a) ☐ All b) ☐ Some * c) ☐ None of:									
	1. Certified copies of the priority documents have been received.								
	2. Certified copies of the priority documents have been received in Application No								
	3. Copies of the certified copies of the	priority documents	have been receive	ed in this National	Stage				
	application from the International Bu	ureau (PCT Rule 17	'.2(a)).						
* 5	See the attached detailed Office action for a	a list of the certified	copies not receive	ed.					
Attachmen	t(s)	•							
	e of References Cited (PTO-892)	4) [	Interview Summary						
	e of Draftsperson's Patent Drawing Review (PTO-948 mation Disclosure Statement(s) (PTO/SB/08)		Paper No(s)/Mail Da Notice of Informal P						
Paper No(s)/Mail Date 6) Other:									

Application/Control Number: 10/698,846

Art Unit: 2151

### **DETAILED ACTION**

## Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.
- 2. Claims 1-28 are rejected under 35 U.S.C. 102(e) as being anticipated by U.S. Patent No. 6,909,700 to Benmohamed et al.

As concerns claims 1, 10 and 19, determining a first cost associated with a logical network link between an active node (column 3, lines 39-40) and a first neighboring node of the active node within an overlay network; determining a second cost associated with a proposed logical network link between the first neighboring node and a second neighboring node of the active node within the overlay network; and reorganizing the overlay network to replace the logical network link with the proposed logical network link in the overlay network with a reorganization probability based on the first and second costs and the size of a neighbor list of the active node, the size of a neighbor list of the first neighboring node and the size of a neighbor list of the second neighboring node (column 5, lines 12-32; figure 7, 702 –size of lists are taken into account for nodes on network, which includes an active, first and second neighboring node; figure 8, 802).

Application/Control Number: 10/698,846

Art Unit: 2151

As concerns claims 2, 11 and 20, wherein the reorganization probability is dependent upon a change in an energy function caused by replacing the logical network link with the proposed logical network link in the overlay network (column 5, lines 12-32).

As concerns claims 3, 12 and 21, wherein determining the first cost comprises: measuring a round trip delay time (column 6, line 54) between the active node and the first neighboring node of the active node within the overlay network.

As concerns claims 4, 13 and 22, wherein determining the second cost comprises: triggering a measurement of a round trip delay time (column 6, line 54) between the first and second neighboring nodes of the active node within the overlay network.

As concerns claims 5, 14 and 23, wherein determining the first cost comprises: determining an available bandwidth (column 6, lines 2-5) in the logical network link between the active node and the first neighboring node of the active node within the overlay network.

As concerns claim 6, 15 and 24 wherein determining the second cost comprises: determining available bandwidth (column 6, lines 2-5) in the proposed logical network link between the first and second neighboring nodes of the active node within the overlay network.

As concerns claims 7, 16 and 25 further comprising: randomly selecting the first neighboring node of the active node from a local address list of the active node (column 25, lines 39-45).

As concerns claims 8, 17 and 26 wherein the overlay network is an unstructured overlay network (column 26, line 48).

As concerns claims 9, 18 and 28 further comprising: restricting a subset of neighboring nodes of the active node from reorganization (column 14, lines 36-40).

Art Unit: 2151

As concerns claim 27, the system of claim 19 wherein the first and second neighboring nodes of the active node are selected from a neighbor list maintained by the active node (column 13, lines 18-19; column 15, line 35; column 15, line 51).

## Response to Arguments

3. Applicant's arguments filed August 31, 2006 have been fully considered but they are not persuasive.

The applicant argues Benmohamed et al. do not disclose a physical network. The applicant's claims are drawn to a method, computer program and system (comprising modules, which appear to be software) and not a physical network.

### Conclusion

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to John B. Walsh whose telephone number is 571-272-7063. The examiner can normally be reached on Monday-Wednesday from 5:30-4:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Zarni Maung can be reached on 571-272-3939. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Application/Control Number: 10/698,846

Art Unit: 2151

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

John B. Walsh Primary Examiner Art Unit 2151 Page 5